

Five Year Transportation Program 2006-2010









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2006-2010

Five Year Transportation Program

VOLUME VIII PRELIMINARY DRAFT November 16, 2005

Introduction

2006-2010

Five Year Transportation Program

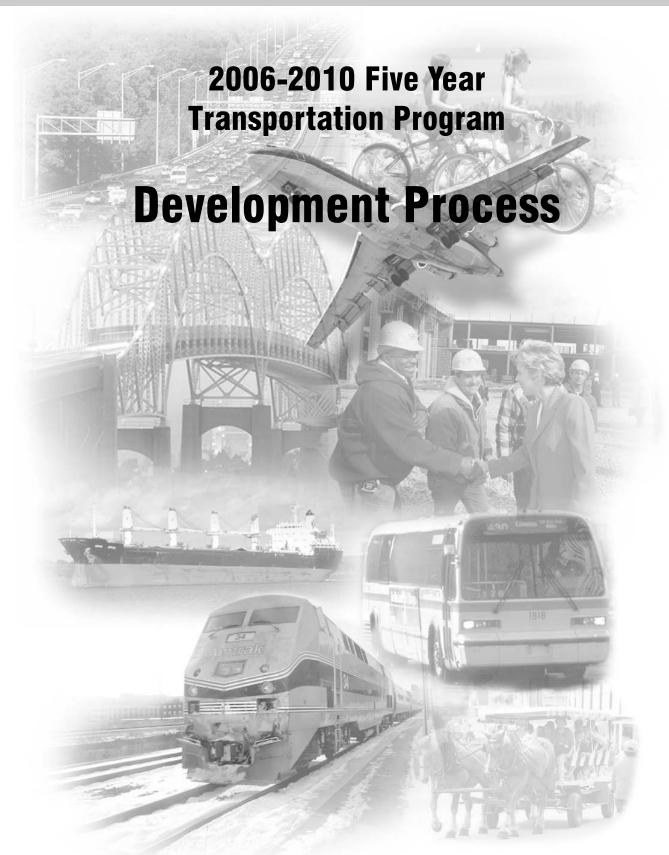
The 2006-2010 Five Year Transportation Program marks the beginning of the Michigan Department of Transportation's second century. MDOT's mission, as we begin our second 100 years, is to preserve manage and fully integrate our road system into the context of a 21st century economy and our responsibility is to coordinate a multi-modal transportation system.

The 2006-2010 Five Year Transportation Program anticipates Michigan's evolving economic and transportation needs by first ensuring that the MDOT will substantially achieve the State Transportation Commission's 1997 system preservation goal of 90% of state roads and bridges in good condition by 2007 and 2008 respectively.

In total, this Five Year Transportation Program represents an approximately \$8.91 billion investment in MDOT's transportation system. More than \$6.7 billion of those funds will be invested in system preservation through the repair and maintenance of Michigan's roads and bridges. Each year, an average of \$156 million will be invested in the aviation program and \$272 million will be invested in the bus, rail and marine/port programs. An annual average of \$1.36 billion will be invested in the highway program over the 2006-2010 timeframe, including routine maintenance and an average of \$60 million per year for targeted safety improvements.

The 2006-2010 Five Year Transportation Program preserves and improves Michigan's transportation network in a fiscally responsible manner. Importantly, it also implements Governor Granholm's Jobs Today Initiative, as well as congressionally designated funds from the recently passed federal transportation reauthorization (SAFETEA-LU), to help grow Michigan's economy, make travel safer and improve the quality of life in Michigan communities.

As part of this Five Year Transportation Program, MDOT will invest over \$618 million in preservation and capacity improvements statewide, utilizing Jobs Today and SAFETEA-LU funds. These projects will support an estimated 11,000 Michigan jobs, and improve approximately 600 miles of pavement and more than 42 bridges.



Development Process

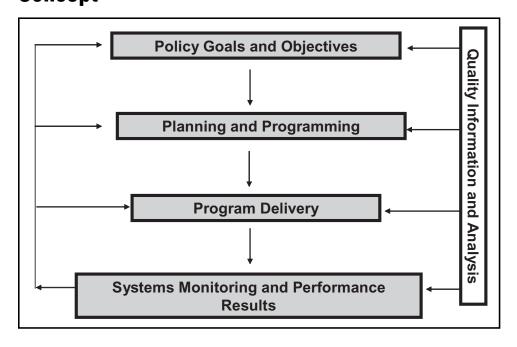
2006-2010

Five Year Transportation Program

The Five Year Transportation Program is a transportation plan that the Michigan Department of Transportation (MDOT) uses to communicate its capital program to Michigan citizens, to maintain stable program delivery, manage financing strategies, and ensure that the department meets its commitments to the motoring public. The program focuses on making government effective, efficient, and inclusive. It provides a safe and secure transportation system, protects natural resources and air quality, improves land use practices, and provides economic development opportunities as set forth in Governor Granholm's vision for improving the quality of life and growing Michigan's economy.

Asset Management Concept

The Five Year Transportation Program is developed based on implementation of the goals and policies outlined by the State Transportation Commission (STC), emphasizing an asset management approach to preserving the transportation system and providing safe mobility to travelers. Transportation asset management is a strategic approach to maximizing the benefits from resources used to manage the transportation infrastructure. It involves collecting data for the physical inventory of our surface transportation system and managing current conditions based on strategic goals and sound investments. The following flowchart highlights the important characteristics of transportation asset management.

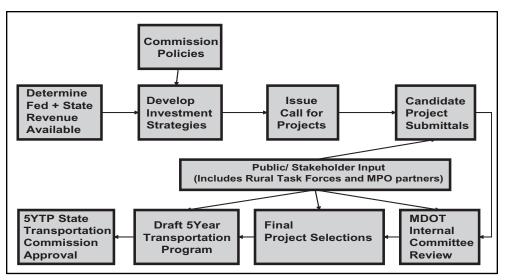


Overall guidance for asset management is provided through explicit policy goals and objectives established by the STC. Integrated analysis of options and tradeoffs investigates how best to meet the needs of customers while responding to policy goals and objectives. Decisions on resource allocation among programs and investment options are made consistent with policy guidance and the results of alternative analyses. Once decisions on resource allocation are made, they are implemented through delivery of services and projects. The entire process is supported by continual system monitoring and performance measurement. This information is used to update each step of the process in future years, through a feedback mechanism. Quality information and analysis supports each step of the process.

The Five Year Transportation Program is an integrated program that includes highways, bridges, public transit, rail, aviation, marine, and non-motorized transportation. The highway portion is a rolling five-year program; each year a new fifth year is added and program/project adjustments are made to other years. This document only pertains to that portion of the programs that MDOT delivers, and does not account for those portions that are delivered locally with state and federal funds that are directly controlled by local agencies, such as transit agencies or county road commissions.

The Five Year Transportation Program development process is a year long, multistage process as shown in the following flowchart.

Five Year Transportation Program



Five Year Transportation Program Development **Key Steps**

2006-2010

Five Year Transportation Program

Determine Estimated Federal and State Revenue Available

Total estimated revenue for the Five Year Transportation Program is a combination of federal and state revenue.

Federal revenue for public transportation and roads will now be determined by the new federal bill entitled: The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), which was passed by Congress on July 29, 2005 and signed into law by President Bush on August 10, 2005. The previous federal bill known as the Transportation Equity Act of the 21st Century (TEA 21), expired at the end of Fiscal Year 2003, but was periodically extended until SAFETEA-LU was passed. During this time, MDOT used a conservative compounded annual growth rate that was applied to the last full year of federal apportionments in order to develop its Fiscal Year 2004 and Fiscal Year 2005 programs. Federal revenue for airport development is authorized through the "Vision 100" legislation which authorizes Airport Improvement Program spending through 2007.

State revenue used to develop the Five Year Transportation Program comes from the Michigan Transportation Fund (MTF), as estimated by MDOT and the Michigan Department of Treasury, Economic and Revenue Forecasting Division. The MTF collects state revenue mainly generated from fuel taxes and vehicle registration. Future year state revenue is forecasted using a long range forecasting model. The estimated state revenue also includes available bond proceeds and sales tax revenues placed into the Comprehensive Transportation Fund and the State Aeronautics Fund.

Develop Investment Strategies

Once estimated revenue is determined, MDOT allocates funding to ensure the effective usage of financial resources (federal and state revenues) on Michigan's transportation program.

The State Transportation Commission (STC) establishes policies, goals, and objectives that provide the basis for funding allocation decisions in the Five Year Transportation Program. For example, in 1997 and 1998, the STC established 10-year pavement and bridge condition goals to be achieved by the end of 2007 and 2008, respectively. After goals are established, improvement strategies are developed and funding is allocated annually in order to achieve these goals. MDOT's current investment strategy focuses investments on preservation of the existing transportation system and on the delivery of a limited number of capacity increase projects. The investment levels outlined in the Five Year Transportation Program support the direction established by the STC and facilitate the accomplishment of program priorities.

For the Highway Capital Program, the process for allocating funding to individual program categories is based on an approved transportation improvement strategy and needs analysis. Major program categories include: Repair and Rebuild Roads, Bridge, Maintenance, Capacity Increase/New Roads, and Safety. Other program categories pertain to specific federal programs, such as Congestion Mitigation and Air Quality (CMAQ), Transportation Enhancement, and Wetland Pre-Mitigation, as well as state programs, such as Program Development/Scoping, Advance Right-of-Way Acquisition, and State Railroad Crossings.

Each program category is monitored to ensure that the program is constrained within the department's anticipated revenue. The funding target development and monitoring process assist in setting the level of funding to achieve transportation improvement goals and provide a tool to constrain the overall statewide program to available revenues.

The investment strategy development process is different for the multi-modal programs that include public transit, rail, aviation, and marine/port. Annual budget development is determined based on federal formula funds and capital funding earmarks from the federal transportation bill, as well as annual state appropriations as guided by state law (for transit, requirements in Act 51 of 1951 pre-determine to a large extent how funds will be invested) and as determined each year by the Michigan Legislature. These earmarks and appropriations guide the type and levels of investments in the multi-modal programs.

Issue Call for Projects

MDOT issues an internal Call for Preservation Projects (Call) annually in January for the Highway Program. The Call letter and instructions are issued to all seven MDOT regions which are responsible for proposing preservation projects. The Call process guides the technical process of preservation project identification and is the mechanism used to implement STC policies and align the department with strategic direction. Key emphasis areas and strategic objectives are outlined and detailed technical instructions are issued. Target funding levels derived from the investment strategy are also included in the instructions to MDOT regions.

The Call currently includes the following preservation work programs: Road Rehabilitation and Reconstruction (R&R), Bridge R&R, Road and Bridge Capital Preventive Maintenance, Safety, Guardrail Replacement, Type II Noise Abatement, Carpool Parking Lot, Intelligent Transportation Systems, and Pump Station Capital Rehabilitation (new to this Call). MDOT regions are responsible for proposing all preservation projects, with the exception of Noise Abatement.

Capacity increase and new roads projects are selected and advanced through project development on the basis of statewide priorities. They are not handled through the annual call for projects.

Multi-modal programs follow a similar Call process, although not identical to the Highway Program. Annual programs are developed, as opposed to five-year programs, because investment strategies are largely dependent on annual budget appropriations determined by the legislature. Program development is not initiated until the funding level is known. The Call process generally involves MDOT soliciting transit, rail, airport, and marine agencies and providers to submit improvement needs for the next year.

Candidate Project Submittal

For the Highway Capital Program, regional improvement strategies for the road and bridge networks are developed by MDOT region staff using the Road Quality Forecasting System (RQFS) and Bridge Condition Forecasting System (BCFS) tools, as well as input from partners/stakeholders who keep in touch with MDOT regarding their needs. The RQFS and BCFS systems are software programs that forecast future pavement and bridge conditions based on certain pavement and bridge funding levels and strategies and are an important part of our asset management strategy. Once a recommended strategy is identified, candidate road and bridge projects are selected that are consistent with the strategy and funds available. Road and bridge candidate projects are identified in concert, so project timing can be coordinated.

Candidate projects are also selected for other highway program areas included in the Call process based on meeting the requirements and guidelines included in the Call letter. The other program categories include Safety, Guardrail, Noise Abatement, Carpool Parking Lot, Intelligent Transportation Systems, and Pump Station Capital Rehabilitation.

Project identification for programs that are not part of the Call is based on available revenue and needs justification.

Candidate project selection for multi-modal programs is accomplished largely at the local level. For the funds the state controls, MDOT solicits local agencies and providers by letter to develop an improvement needs list. Needs identification may also involve an application process as with certain freight programs.

Project selection decisions are guided by input received throughout the planning process and made in consultation with local, rural task force, and Metropolitan Planning Organization (MPO) partners. The development of a five year transportation program is an iterative process. Public involvement in project selection is sought for the fifth year (with a new year being added at the beginning of each fiscal year) and at adjustments along the way. For example, MDOT is represented at MPO meetings and presents candidate project considerations for the fifth year addition to the five year transportation program and any adjustments for review and comment.

MDOT regions also regularly participate in local public meetings to discuss MDOT projects (in 2004, approximately 200 public meetings were conducted).

Involving the public and local stakeholders is key to developing creative solutions to transportation issues. MDOT seeks public involvement throughout the process from corridor planning, project scoping, environmental assessment, and design.

MDOT Internal Committee Review

Candidate projects for the Highway Program are reviewed for consistency with region and statewide goals identified in the Call instructions to ensure that all relevant elements are accounted for, that the proposed fixes are realistic, and that the budget estimates to accomplish the given projects are aligned with anticipated revenue. This review is conducted by an internal inter-disciplinary team with expertise in various areas of program development. Review comments and feedback are submitted back to the regions. Any necessary adjustments are made to candidate projects.

Multi-modal projects are reviewed by MDOT staff. Factors in the review process include ensuring consistency with commission policy, compliance with standards, goal achievement, meeting eligibility requirements, degree of readiness, and available funding.

Project Selection

Projects are selected as candidates for the highway program after the regions meet individually with the internal review team and MDOT leadership. The review ensures that the projects support STC policies and objectives, support the MDOT strategic direction that is communicated in the Call letter, and is financially constraint to targeted funding levels. Results of this review process are summarized and presented to MDOT management and leadership for approval.

When making candidate project selections for the highway program, MDOT strives to design programs that have a balanced "mix of fixes" framework (program composed of various treatment alternatives, including preventive maintenance, rehabilitation, and reconstruction) as well as other strategic considerations. This may entail making adjustments to intervening year programs, not just the new fifth year of the Five Year Transportation Program.

For multi-modal projects, project selection differs from mode to mode and even within each mode. For example, the largest investment of state transit funds is done by formula specified in Act 51; there is no selection process per se. In contrast, project selection for state funded inter-modal terminals occurs throughout the year as potential projects become ready for funding and funds are available.

Projects remain in candidate status until the Five Year Transportation Program is approved by the STC.

Draft Transportation Program

Assembly of the draft Five Year Transportation Program begins after the Call process is completed for the highway program. At the same time, information about annual programs under development within the public transit, rail, aviation, marine and non-motorized transportation modes is compiled. Development of the multi-modal annual programs may be at different stages depending on the status of the annual federal and state appropriations process. MDOT strives to deliver a program for approval that clearly is consistent with STC policies and direction.

The key steps involved in the assembly and approval of the document include:

- Compiling highway projects within major improvement categories for listing within the document.
- Compiling anticipated program and project initiatives for the coming year for multi-modal programs.
- Outlining program revenue assumptions and investment strategies for utilizing the funding available.
- Documenting previous year accomplishments and progress toward approved condition and program goals.
- Identifying statewide program strategies and regional improvement strategies.
- Obtaining approval of the draft document by MDOT leadership and the STC.
- Posting of the draft document to the Web for public comment and conducting
 public listening sessions throughout the state for additional input on the program.
 Public involvement comments are documented summarized, presented at the following STC meeting and final approval of the document is requested.
- Submittal of the final Five Year Transportation Program to the Michigan State Legislature.

Public Involvement/Outreach Efforts Throughout the Process

One of the strengths of MDOT's program development process is the accessibility afforded by the Transportation Service Centers (TSCs), where stakeholders can contact MDOT at any time during the process. Public listening sessions are conducted after the draft Five Year Transportation Program is presented to the State Transportation Commission. The meetings are held at TSC locations throughout the state.

For example, approximately 200 people attended public listening sessions for the 2005-2009 Five Year Transportation Program. The attendees included 86 local government officials, 36 unaffiliated citizens, 33 community and business group leaders, and 80 state employees.

More formal public and stakeholder input opportunities exist throughout the process. Outreach and coordination occurs very early in program development, beginning with candidate project selection and continues through final project selection and review of the draft program. Stakeholders include the public, rural task forces, MPO partners, individual units of government, and the legislature. We are also improving the process of tracking public engagement at the regional level, thereby enhancing local communication and follow-up with transportation industry partners and the general public.

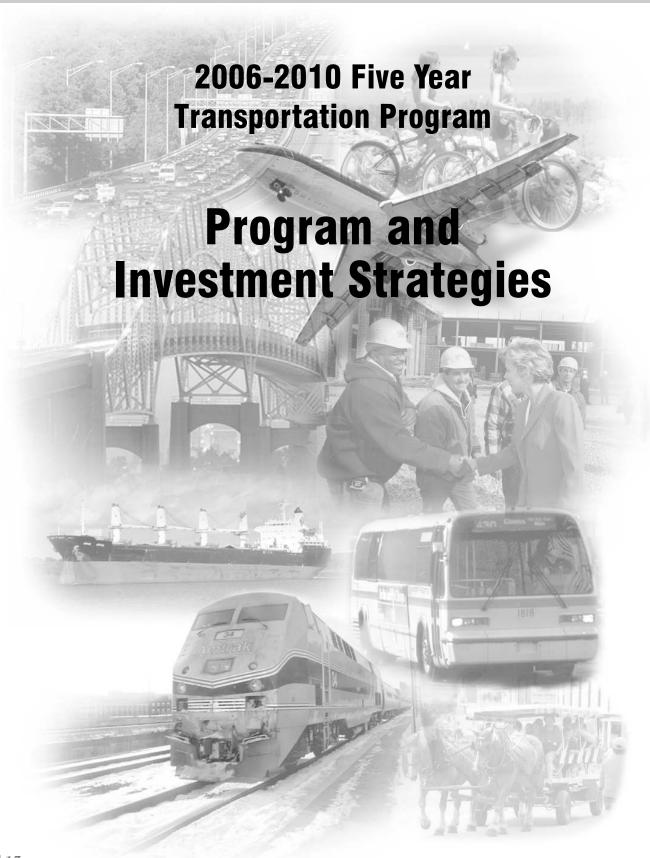
Michigan has conducted two transportation summits to gather valuable input from stakeholders and concerned citizens regarding our transportation system. The focus of the transportation summit is to continue to build on the collective vision for transportation in our state that addresses important issues like the economy, protecting our environment, and improving the quality of life for our citizens. On December 15, 2004, attendees at the second annual summit worked together on a set of action plans for the future of transportation in Michigan.

MDOT continues to emphasize and strengthen partnering efforts with transportation stakeholders and the general public throughout the Five Year Transportation Program. Workshops and stakeholder meetings are also conducted to incorporate context sensitive solutions into transportation projects.

In addition, local outreach for aviation projects takes place during development and adoption of a master plan for each airport facility. A master plan must be approved by MDOT and the Federal Aviation Administration to be eligible to receive state and federal funds. Public hearings are held as part of the process of developing the plans. Additionally, funding for each project is approved in a public meeting of the Michigan Aeronautics Commission. Project selection takes place within the plan framework.

As part of our continuing public involvement, MDOT posted the draft 2005-2009 Five Year Transportation Program on-line during the week of December 13, 2004, for a short public comment period. MDOT's Web site provides a wide variety of information, including: construction project information, news releases, truck weight and transport permit information, and links for doing business with MDOT that include construction and service prequalification.

MDOT also provides over 35 on-line publications. Please visit our Web site at www.michigan.gov/mdot



Program

The Michigan Department of Transportation (MDOT) FY 2006-2010 Transportation Program continues to implement the goals and policies outlined by the State Transportation Commission, emphasizing preservation of the transportation system and providing safe mobility to motorists. The program focuses on making government effective, efficient, and inclusive; providing a safe and secure transportation system; protecting natural resources, air quality, and improving land use practices; and providing economic development opportunities as set forth in Governor Granholm's vision for improving the quality of life and growing Michigan's economy.

MDOT will continue to emphasize and strengthen partnering efforts with transportation stakeholders and the general public throughout this five-year program. MDOT will also continue to implement processes developed at workshops and stakeholder meetings to incorporate context sensitive solutions into transportation projects, and we will hold public listening sessions on future Five Year Transportation Programs. We are also improving the process of tracking public engagement at the regional level, thereby enhancing local communication and follow-up with transportation industry partners and the general public.

Preservation of Michigan's existing transportation system and the safety of that system remain MDOT's highest priorities. This Five Year Transportation Program will invest more than \$5.0 billion on system preservation through the repair and maintenance of Michigan's roads and bridges. In addition, more than half of the investment programmed for capacity improvements will go toward preserving existing roadway adjacent to those new lanes, thereby helping to grow Michigan's economy simultaneously through both preservation and capacity enhancement. Investments in Michigan's transportation system will focus on a comprehensive safety program and increased emphasis on elderly mobility and expanded work zone safety efforts.

Preserve First

The 2006-2010 Five Year Transportation Program continues the implementation of Governor Granholm's Preserve First initiative that began in 2003. The *Preserve First* program places an increased emphasis on preserving our transportation system rather than expanding it. Preserve First enabled substantial progress toward the future pavement condition goal of having 95 percent of the freeways and 85 percent of the non-freeways in good condition by 2007. Preserve First provides approximately \$246 million in additional road and bridge preservation work over the next two years, beginning with the 2006 program. These projects were selected based on a statewide needs evaluation, focusing on freeways and routes carrying high volumes of traffic.

An additional \$36 million will be directed to safety, enhancement and noise abatement programs for the period covering 2006-2007. Preserve First will help ensure continued progress and success in reaching the department's pavement and bridge condition goals.

2006-2010

Five Year Transportation Program

Jobs Today

With this edition of the Five Year Transportation Program, we begin implementation of Governor Granholm's Jobs Today initiative. This initiative will create employment opportunities statewide and help stimulate the economy over the next three years. The Jobs Today program will advance work previously announced or add new work in 2006 and 2007. In addition to stimulating job growth, this investment will enable continued progress toward achieving and sustaining the department's state trunkline pavement condition goals.

Approximately \$418 million in trunkline investments will be added or accelerated as part of this initiative and will be funded through additional bond revenue. Approximately \$267 million will be for road and bridge preservation work and approximately \$151 million will be for critical capacity improvements. From 2006 to 2008, this initiative will fund 145 projects, improving approximately 600 miles of pavement and 42 bridges, as well as address six capacity deficiencies.

With the Jobs Today investment, MDOT anticipates that 91 percent of the freeway system and 90 percent of the non-freeway system will be in good condition by the end of 2007. Viewed as an average of the entire system, 90 percent of our roads will be in good condition by the end of 2007.

Economic Benefits of the Transportation Program

Transportation plays a fundamental role in growing Michigan's economy and protecting quality of life in our communities. A safe, well-maintained and efficient transportation system provides the backbone for all economic activity within the state of Michigan. Without this comprehensive transportation system, Michigan's economy would be at a great competitive disadvantage and the quality of life within our communities would greatly deteriorate. MDOT's investments to maintain Michigan's complex infrastructure network results in benefits both for Michigan's overall economy and individual industry sectors.

In late 2004, MDOT, working with the University of Michigan and the Economic Development Research Group, completed an economic benefits assessment of its 2005-2009 Five-Year Highway Program¹. This study, which was one of the first of its kind for a state DOT, estimated that MDOT's Highway Program would support 26,550 jobs in 2005 and generate \$6.5 billion of inflation-adjusted Gross State Product for Michigan over the life of the program. Over the past year, the results of this study were shared with numerous transportation stakeholders, including the Transportation Commission, the Legislature, Metropolitan Planning Organizations, and other state DOT's at the American Association of State Highway Transportation Officials (AASHTO) Mississippi Valley Conference.

¹ Please note at the time this preliminary draft document was printed, final numbers from University of Michigan were not available.

Again this year, MDOT consulted with the University of Michigan's Institute of Labor and Industrial Relations and the Economic Development Research Group to assess the economic benefits associated with MDOT's 2006-2010 road and bridge program. To estimate the impact MDOT's road and bridge investments has on Michigan's economy, an economic/demographic model constructed by Regional Economic Models, Inc. (REMI) of Amherst, Massachusetts, was used and adapted by the University of Michigan.

The findings of the study show that in 2006, MDOT's road and bridge system investments will support \$1.76 billion of economic activity (2004 dollars), measured in terms of Gross State Product, and will support 31,000 jobs. A large portion of these employment opportunities will benefit the state's construction industry, with the remaining employment benefits occurring in the professional services and business services sectors of the state's economy.

When compared with the results of the department's previous 2005-2009 study, MDOT estimates its 2006 construction program will support approximately 4,500 more jobs and will increase the Gross State Product by approximately \$200 million over 2005 estimates. These results reiterate the positive economic impacts MDOT's highway program investments are having on the state's economy.

MDOT's FY 2006-2010 program increases emphasis on providing every Michigan citizen with transportation choices and access, while maintaining and preserving our critical transportation assets.

Investments made on the multi-modal segments of Michigan's transportation system also contribute significant benefits to Michigan's economy. The American Public Transit Association estimates that for every \$10 million spent on transit capital investment, 314 jobs are created. Similarly, every \$10 million spent on transit operations, creates an estimated 570 jobs. Based on these national findings, MDOT estimates its transit capital and local bus operational system investments will support 11,610 jobs in 2006 (Source: American Public Transit Association, October 1999. Public Transportation and the Nation's Economy: A Quantitative Analysis of Public Transportation's Economic Impact).

Aviation activities contribute over \$10 billion annually to Michigan's economy. MDOT's Airport Improvement Program directly supports many sectors of Michigan's economy.

Past studies have demonstrated that for every million dollars invested on aviation construction projects, 43 jobs are created. In 2006, MDOT estimates that its Airport Improvement Program will support approximately 6,923 jobs.

In total, MDOT estimates that its 2006 Transportation Program will support nearly 50,000 jobs that will directly benefit Michigan's economy.

SAFETEA-LU

On August 10, 2005, the Safe, Accountable, Flexible and Efficient Transportation Act: A Legacy for Users or SAFETEA-LU was signed into law. SAFETEA-LU is the long-awaited successor to the Transportation Equity Act for the 21st Century (TEA-21), which expired on September 30, 2003, and was extended 12 times by Congress.

SAFETEA-LU authorizes federal funding for surface transportation programs for Fiscal Years 2005 through 2009. When combined with enacted spending levels for Fiscal Year 2004, the six-year nationwide transportation spending authorizations will total \$286.4 billion, representing an increase of more than 31 percent over TEA-21 levels. Under SAFETEA-LU, the six- year total spending on transit programs and projects will reach \$52.6 billion, while spending on highway programs and projects will reach \$233.9 billion.

SAFETEA-LU continues to build on the successes of previous surface transportation acts. A few highlights of the legislation are listed below.

- Michigan's donor state status was improved through an increase in the minimum guaranteed return on taxes Michigan motorists send to Washington, D.C. States are currently guaranteed to receive a 90.5 percent on every dollar of transportation taxes sent to Washington. The minimum guaranteed return will increase under SAFETEA-LU to 91.5 percent in 2007, and 92 percent in 2008 and 2009.
- As the name suggests, one on the primary focuses of SAFETEA-LU is on safety. Funding for safety programs nearly doubled when compared to TEA-21 levels. In addition, states are required to work with all major state and local safety stakeholders to implement a statewide safety plan, and empowered with new flexibility in effort to significantly improve transportation safety. Michigan is a recognized leader in this area, having already prepared a strategic highway safety plan. Much of SAFETEA-LU's new focus on safety has been incorporated into the preservation element of our road and bridge program.
- A new program was created to direct funding to the nation's international border crossings. With some of the busiest commercial and passenger international crossings, Michigan will benefit from this program as we continue our work towards improving the safety, security and efficiency of these crossings.
- Enhanced opportunities for innovative finance will help leverage and maximize all available funding. SAFETEA-LU further expands available resources from non-traditional sources such as private activity bonds.
- More federal transit resources are directed toward creating additional opportunities for rural, low-income, disabled, and elderly populations. In addition, the share of capital funding going to bus systems (versus commuter rail systems) will be higher than it was under TEA-21.

Impacts to the Five Year Transportation Program

Federal revenue accounts for roughly half of the funding used to support our five year transportation program. The creation of new programs and the changing federal priorities included in SAFETEA-LU has presented unique challenges to our efforts to maintain continuity in the five year transportation program.

Within the federal highway program, there are a handful of funding categories (known as core programs) through which most federally aided projects are funded. The funding for these core programs in SAFETEA-LU grew at a slower rate than overall funding. Consequently, the core programs' share of total highway funding declined from 86 percent in TEA-21 to less than 82 percent in SAFETEA-LU.

While core programs were being reduced, both the dollar value and total number of congressionally designated (or earmarked) highway projects increased significantly. TEA-21 contained \$11 billion worth of highway earmarks. This amount nearly doubled in SAFETEA-LU to \$21.6 billion. Earmarked project funding comprises 11 percent of highway authorizations in SAFETEA-LU, up from only 6 percent in TEA-21.

A sizable portion of our core program funds essentially have been replaced with funding earmarked for specific projects and new programs. As a result, our federally available revenue has become significantly less flexible. This reduction in flexibility makes it more difficult to address needs that have been or will be identified through objective research, complicates the planning process, and also poses new challenges to attaining previously announced infrastructure goals.

FY 2006-2010 Revenue Assumptions

2006-2010

Five Year Transportation Program

Federal Revenue Assumptions for Highways

Highway capital program revenues for FY 2006 to FY 2010 include an increase in federal funding based on the recently passed federal reauthorization bill known as SAFETEA-LU. The obligation limit under SAFETEA-LU has been set at 85 percent for FY 2005 for all states and is estimated to average 90 percent over the life of SAFETEA-LU. FY 2006 to FY 2010 federal aid revenue is based on SAFETEA-LU obligation authority estimates provided by MDOT's Bureau of Transportation Planning. It is projected that \$3.8 billion in federal aid obligation authority will be made available to the trunkline capital program for this Five Year Transportation Program.

SAFETEA-LU contained \$643 million in congressionally designated projects and earmarks for Michigan. Of this amount, approximately \$196 million was designated for MDOT highway projects and \$244 million was designated for local agency highway projects. The remaining \$203 million was designated for transit related projects. The department is committed to utilizing all available federal aid which is available to Michigan under the provisions of SAFETEA-LU. These earmarks will provide positive transportation and related economic benefits for every region of the state from I-75 in the Upper Peninsula to I-94 in Kalamazoo.

State Revenue Assumptions for Highways

The state aid revenue estimate used to develop the 2006-2010 Five Year Transportation Program for highways is based on MDOT's share of the fiscal year 2005 and fiscal year 2006 Michigan Transportation Fund (MTF) as estimated by the Department of Treasury, Economic and Revenue Forecasting Division. Future year state revenue is forecasted using a Long Range Forecasting model by MDOT, Statewide Transportation Planning Division.

MDOT's state transportation revenues available from the state trunkline fund (STF), including routine maintenance, is estimated at \$2.781 billion during the 2006-2010 Five Year Transportation Program timeframe.

This Five Year Transportation Program also includes new bond revenue. Approximately \$260 million in new bonds is scheduled for 2006 to support the Preserve First Initiative. MDOT will also invest approximately \$600 million in additional bonding to support funding for the Governor's Jobs Today initiative and SAFETEA-LU earmarks. The new bonding will be in the form of Grant Anticipated Revenue Vehicle (GARVEE) notes.

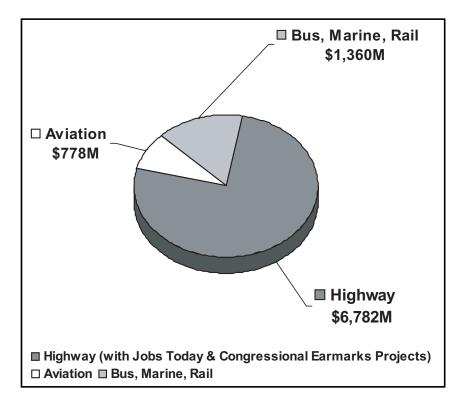
FY 2006-2010

Investment Strategy

This Five Year Transportation Program invests approximately \$8.92 billion in MDOT's transportation system. This includes five years of investments in the highway program (Fiscal Years 2006-2010) and five years of investments in the aviation, bus, rail and marine programs. Each year, an average of \$156 million will be invested in the aviation program and \$272 million will be invested in the bus, rail and marine/port programs. An annual average of \$1.36 billion will be invested in the highway program over the 2006-2010 timeframe, including routine maintenance. This investment level is not only fiscally responsible, but supports a program that ensures the preservation and improvement of our transportation network. See the following chart:

2006-2010

Five Year Transportation Program



MDOT's Five Year Transportation Program

(Total = \$8.92 Billion)

2006-2010 Highway Program Investment Strategy

2006-2010

Five Year Transportation Program

Our five-year investment strategy is a key component of the cooperative planning process and provides the public with a longer term perspective regarding the transportation program. New technology makes it possible to combine long-term goals with current condition data to generate a five year program as well as integrate the data to coordinate road and bridge improvements and achieve new investment efficiencies.

The Michigan Department of Transportation (MDOT) FY 2006-2010 Highway Program investments will total approximately \$6.78 billion including pre-construction phases (project scoping, environmental clearance, design, right-of-way acquisition) and construction projects. The total includes additional funds from the Governor's Jobs Today Initiative and SAFETEA-LU earmarks.

This five year transportation program will provide Michigan travelers with an average of approximately 345 miles of improved roads in each of the next five years, as well as repairs to an average of more than 300 bridges per year. We will also manage our road system by extending the life of more than 1,500 miles of pavement each year through the Capital Preventive Maintenance (CPM) program. The investment of the Five Year Highway Program totals \$6.78 billion from FY 2006 to FY 2010 or an average of \$1.36 billion annually. The following charts depict MDOT's FY 2006 - 2010 Road and Bridge Program Investment Strategy.

MDOT' 5 Year Highway Program

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Draft as of 11/09/05

REPAIR AND MAINTAIN ROADS AND BRIDGES REPAIR AND REBUILD ROADS		Annual Average		5-Year Total	
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Preserve Rehabilitation & Reconstruction (1)	\$	421 million	\$	2,107 million	
Non-Freeway Resurfacing	\$	8 million	\$	40 million	
Passing Relief Lanes (1)	\$	6 million	\$	30 million	
Capital Preventive Maintenance	\$	107 million	\$	533 million	
TOTAL REPAIR AND REBUILD ROADS	\$	542 million	\$	2,710 million	
REPAIR AND REBUILD BRIDGES					
Preserve Rehabilitation & Reconstruction	\$	133 million	\$	663 million	
Capital and Scheduled Preventive Maintenance	\$	35 million	\$	178 million	
Big Bridge	\$	18 million	\$	88 million	
Special Needs (5)	\$	3 million	\$	15 million	
Blue Water Bridge	\$	3 million	\$	15 million	
TOTAL REPAIR AND REBUILD BRIDGES	\$	192 million	\$	959 million	
ROUTINE MAINTENANCE	\$	278 million	\$	1,391 million	
TOTAL REPAIR AND MAINTAIN ROADS & BRIDGES	\$	1012 million	\$	5,060 million	
CAPACITY IMPROVEMENT (CI) (2) AND NEW ROADS (NR)					
Capacity Improvements (1)	\$	87 million	\$	434 million	
Research Capacity Improvements	\$	6 million	\$	28 million	
New Road Construction (1)	\$	6 million	\$	32 million	
Research New Roads	\$	4 million	\$	20 million	
Border Infrastructure Program	\$	22 million	\$	110 million	
TOTAL CI & NR	\$	125 million	\$	624 million	
SAFETY PROGRAM ⁽⁶⁾					
Signs	\$	14 million	\$	67 million	
Markings	\$	13 million	\$	67 million	
Guardrail and Attenuators	\$	5 million	\$	26 million	
	\$	9 million	\$	44 million	
Signals	\$ \$	19 million	\$ \$	96 million	
Safety Program		60 million		300 million	
TOTAL SAFETY PROGRAM	\$	oo million	\$	300 million	
CONGESTION MITIGATION AND AIR QUALITY (CMAQ)	\$	30 million	\$	150 million	
INTELLIGENT TRANSPORTATION SYSTEM (ITS)	\$	12 million	\$	61 million	
OTHER					
Other Federally Funded Programs (3)	\$	59 million	\$	294 million	
State Programs (4)	\$	59 million	\$	293 million	
TOTAL OTHER	\$	118 million	\$	587 million	
TOTAL FIVE-YEAR TRUNKLINE PROGRAM	\$	1,356 million	\$	6,782 million	

Source: Estimated Capital Outlay Program Template

^{1.} Projects list included in the Five Year Transportation Program document. Preserve First and JobsToday projects included.

^{2.} A substantial portion of Capacity Improvement projets includes the preservation of the existing road.

^{3.} Other Federally Funded Program include Enhancement, Railroad Crossing, Safe Routes to Schools, Noise Abatement, and other programs

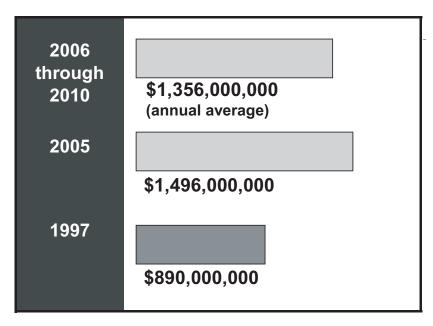
^{4.} State programs include Transportation Economic Development Fund - Category A (TEDF A), Advanced ROW acquisition, Michigan

Institutional Roads (MIR) program, Non-discretionary "M" Program, State Railroad Crossing program, Program Development and Scoping.

^{5.} Bridge Special Needs includes emergency bridge repair items found during inspection.

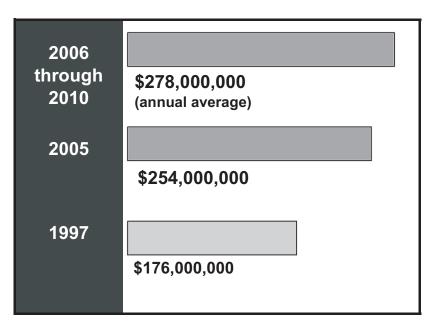
^{6.} Additional Safety funds are utilized in other programs such as road Rehab & Reconstruction, Bridges, Capacity Improvements, and New Roac

Annual Road & Bridge Investments

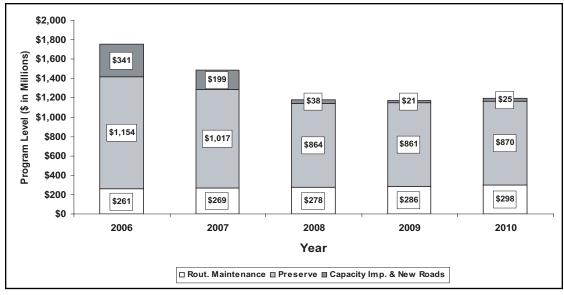


Each Year from 2006 to 2010, MDOT will invest an average of \$1.356 billion to improve approximately 345 miles of road and approximately 360 bridges on the state highway system. Routine Mainenance activities also are included in this investment level.

Annual Routine Maintenance Budget



Beginning in 2006 and continuing through the life of this Five-Year Program, an average of \$278million per year will be spent for routine maintenance. Routine maintenance consists of many important day-to-day activities including pothole filling, snow plowing, sweeping, and grass cutting. This effort continues the increased funding for routine maintenance beyond the \$176 million spent in 1997.

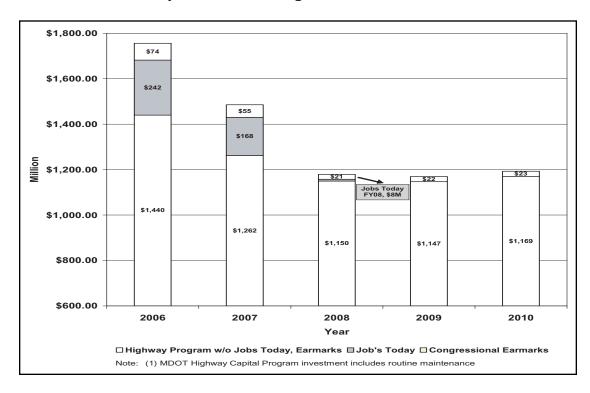


FY2006 to FY2010 Five Year Highway Program

with Jobs Today & Congressional Earmarks

The FY 2006-FY 2010 Highway Program continues to focus on preserving and maintaining the state's roads and bridges. This is accomplished through a combination of long-term fixes (reconstruction), intermediate fixes (resurfacing/rehabilitation), an aggressive capital preventive maintenance program, as well as routine maintenance. The above chart demonstrates the emphasis on preserving our system.

The following graph shows the FY 2006-2010 Highway program breakdown which includes the Jobs Today Initiative and Congressional Earmark investments.



FY2006 to FY2010 Five Year Highway Program (1)

with Jobs Today & Congressional Earmarks

Note: (1) MDOT Highway Capital Program investment includes routine maintenance

2006-2010 Multi-Modal Program Investment Strategy

2006-2010

Five Year Transportation Program

MDOT's FY 2006-2010 Multi-Modal Program provides for capital and operating assistance, technical support and safety oversight of Michigan's air, rail passenger, rail freight, marine, intercity bus, charter bus, limousine and local transit sectors of the transportation system. The multi-modal program focuses on continued, safe and secure operation of the existing transportation system through routine maintenance, capital replacement/rehabilitation, and preservation of existing service levels.

MDOT faces several challenges in laying out a five year multi-modal program, including:

- Implementation of the program is subject to annual appropriation of state and federal funds. State appropriations for multi-modal programs, in particular the Comprehensive Transportation Fund (CTF), can be more volatile than the highway program appropriations.
- For the CTF portions of the program (Bus, Marine and Rail), annual appropriations are heavily guided by the mandates of Public Act 51 of 1951; MDOT's discretion is limited.
- Since much of the state's multi-modal infrastructure is owned and operated by local and private entities, MDOT investment strategy is largely a function of and in response to decisions made by entities other than MDOT.

As a result of these challenges, MDOT presents its five-year multi-modal program with the strong caution that the assumptions used to develop the program are subject to significant annual influences. Also, since project level decisions are largely made outside of MDOT and are made annually based on available funding, the multi-modal five-year program does not include project level information.

It is also important to note that the transit portion of Michigan's overall multi-modal program, is mainly governed by local entities. Statewide transit programs are a significant portion of the multi-modal program, however, only 20 percent of the federal transit operating and capital funding that comes to Michigan is apportioned to MDOT. The remaining 80 percent is apportioned directly to individual transit agencies; MDOT is not involved in programming or managing the funding and as such, the funding is not reflected in MDOT's program.

Multi-Modal Investment Strategy

MDOT's five-year multi-modal investment strategy is established on a program-by-program basis.

Aviation

MDOT's aviation programs will be supported by federal funds established by *Vision* 100, *Century of Aviation Reauthorization Act*, annual appropriations from the State

Aeronautics Fund and Airport Safety and Program Preservation (ASAP) bonds issued against the State Aeronautics Funds. The overall aviation program is largely determined annually in response to: a) local investment strategies established by individual airports consistent with the Michigan Aviation System Plan (MASP) and the Policy Plan for Michigan Air Service (PPMAS), both as approved by the Michigan Aeronautics Commission and b) federal priorities.

In general, state and federal aviation funds will be focused on:

- Preservation and maintenance of locally owned infrastructure.
- Safety and security (infrastructure and operations).
- Capacity improvement.

MDOT's investment strategy for aviation includes the following programs: Aviation Improvement, Air Service Program and All Weather Airport Access.

Airport Improvement Program

The Airport Improvement Program provides funding for approximately 236 public use airports for capital improvement projects and pavement maintenance. Of the 236 eligible airports, 93 airports receive federal entitlement funding as part of the National Plan of Integrated Airport Systems. As the majority of Michigan's public use airports that receive federal entitlement funds are owned and operated by local governments, projects using these funds are selected by the airports, not MDOT.

Air Service Program

The Michigan Air Service Program is designed to attract and maintain quality air service for Michigan's 17 airports with scheduled air service. MDOT specialists work directly with the airlines and Michigan airports to increase, recruit, and maintain levels of air service throughout the state.

All Weather Airport Access Programs

The All Weather Airport Access Program enables airports to be accessible to pilots during inclement weather conditions. This includes 36 state-owned Automated Weather Observing Systems (AWOS) which provide pilots with continuous weather information via radio, telephone and computer.

Additionally, this program includes pilot information systems at 52 Michigan airports. These systems allow pilots to check weather conditions at any airport in the United States.

Also, while not specifically covered in its five year investment strategy, MDOT's aviation programs will also include numerous aviation safety and education initiatives. Efforts will include: pilot safety seminars, an annual Aviation/Aerospace Teacher

Workshop, licensing of public-use airports, licensing of flight schools, annual publication of the Michigan Airport Directory and Aeronautical Charts, and quarterly publication of MDOT's safety publication, *Michigan Aviation*.

Bus, Marine and Rail

MDOT's Bus, Marine and Rail programs include local transit, intercity bus, passenger rail, marine, port and rail freight. These programs will be supported by annual appropriations from the Comprehensive Transportation Fund (CTF), the transit portions of the SAFETEA- **U** and various other revenues.

Because of the significant annual variations in CTF appropriations, a total five year program amount is provided; i.e., five year investment levels are not provided for the individual Bus, Marine and Rail programs. However, a discussion of MDOT's investment strategy for each of the major Bus, Marine and Rail programs is provided below.

Local Transit

Investments for Local Transit are largely determined by detailed requirements set forth in Act 51 of 1951 for annual distribution of CTF revenues and the eligible uses of federal formula apportionments in SAFETEA-LU.

In general, state and federal transit funds are focused on:

- Preservation of existing services via state and federal operating assistance to service providers.
- Preservation and maintenance of the existing locally-owned infrastructure via distribution of federal funds and state match for routine vehicle replacement in rural areas and among specialized service providers.
- Support of local capital strategies established by individual transit agencies via matching federal capital grants for infrastructure replacement and rehabilitation, and including some capacity expansion.

To the degree funds are available annually, the five year program will largely consist of funding for operating and capital support to local bus operators that provide service to the general public.

Assistance will also be provided to support transportation services focused on the needs of senior citizens and persons with disabilities, and to help meet the transportation to work needs of low-income individuals.

A total 116 transit providers in all 83 Michigan counties will be provided support under these programs. The two most prominent local transit programs will continue to be:

- **Local Bus Operating**: Act 51 mandates state funding for operational support of transit systems (including ferry boat operations) and federal formula funds for operating assistance to non-urban transit agencies.
- **Bus Capital:** State funds to match federal capital grants to MDOT and transit agencies and federal capital funds that are apportioned or earmarked to MDOT and subsequently passed on to individual transit providers.

Intercity Bus and Passenger Rail

MDOT's investment strategy for Intercity Bus and Passenger Rail is largely determined by:

- Detailed requirements set forth in Act 51 of 1951 for annual distribution of CTF revenues
- Eligible uses of federal formula apportionments (intercity bus) and
- Annual state budget boilerplate (passenger rail).

State intercity bus and passenger rail funds are focused on preservation/ maintenance of existing services by providing financial assistance to service providers, both operating assistance and capital assistance for maintenance and improvement of carrier-owned infrastructure.

Federal funds are focused largely on preservation of existing intercity services through operating and capital assistance.

To the degree funds are available annually, the five year program will include:

- Intercity Terminals: State funding for intercity bus and/or rail terminals.
- **Intercity Service Development**: State and federal funds to support intercity bus service in the Upper Peninsula and northern Lower Peninsula.
- Intercity Bus Capital: State funds to support intercity bus capital needs, largely motor coach replacements.
- Passenger Rail: State funds to support legislatively-mandated intercity passenger rail service and federal funds (if available) for rail passenger capital improvements.

While not included in the investment strategy, the intercity program also includes regulation of the commercial business activities of intercity, charter bus and limousine services.

Marine and Port

MDOT's investment strategy for Marine and Port programs are based on the detailed requirements set forth in Act 51 of 1951 for annual distribution/use of CTF revenues and the requirements of Act 639 of 1978. The marine program is focused on preservation/maintenance of existing local owned public ferry infrastructure as determined by the ferry authorities. The port program is defined by statutory mandate.

The programs in this category provide funding to eligible port authorities and to eligible transportation authorities which provide public ferryboat services.

To the degree that funds are available, Marine and Port services will include:

- **Port Development**: Statutory mandated operating support for the Detroit Wayne County Port Authority (DWCPA).
- **Marine Passenger:** Capital support to eligible transportation authorities providing for public ferry operations.

Rail Freight Services and Safety

MDOT investment strategies for rail freight are determined by a combination of:

- Investment decisions made by rail-dependent industries.
- Detailed requirements set forth in Act 51 of 1951 for annual distribution/use of CTF revenues.
- Federal highway funds available for local grade crossing as provided for in SAFETEA-LU.
- Available fund balance in the Michigan Rail Loan Assistance Program revolving fund.

Investments are focused on preservation/maintenance of the existing state owned infrastructure, safety improvements (capital) and economic development.

Under the Rail Freight Services and Safety programs, MDOT manages approximately 650 miles of state-owned rail lines operated by five railroad companies. MDOT provides loans and/or grants to railroad users to improve rail infrastructure and promote economic development.

To the degree funds are available, the five year Rail Freight program will include:

Freight Property Management-State-Owned Rail Line Management Program: Vegetation control along with bridge, culvert and crossing repairs on state-owned property.

 Freight Preservation and Development: Capital improvements on state-owned rail infrastructure to enhance rail service in rural areas and small towns throughout Michigan. Through the Economic Development program, financial assistance is offered to rail users in the development and/or expansion of business and industries.

The program offers financial assistance in the form of loan/grants covering up to 50 percent of the rail freight portion of the project when the rail improvement facilitates economic development.

- Michigan Rail Loan Assistance Program (MiRLAP): A self-sustaining revolving (no interest) loan program to assist the rail industry to preserve and improve Michigan's rail infrastructure and contribute to the stability and growth of the state's business and industry. Loans of up to \$1.0 million per project can be used for track rehabilitation; bridge and culvert repair; new construction, transload facilities, and rail consolidation projects with a repayment period of up to ten years. The MiRLAP loans fund up to 90 percent of the rail portion of the project costs with at least a 10 percent funding match from the applicant.
- Local Grade Crossing Program: Provides local governmental units and railroad companies assistance with developing and implementing projects that enhance motorist safety at public highway-railroad crossings, including <u>safety</u> <u>enhancement</u>, <u>closure</u>, and surface repair <u>pilot</u> projects.

While not included in the investment strategy, the Rail Freight program will also include the regulation of public railroad grade crossings, approximately 5,000 of which are inspected biennially.

Multi-Modal Revenue Assumptions

There are several challenges to projecting out multi-modal revenues over a five-year period, including:

- MDOT's multi-modal programs are supported by a number of state and federal revenue streams, each one of which is subject to a separate set of influences.
- State revenue sources for the MDOT's multi-modal program are not constitutionally protected and therefore subject to re-direction or reversal back to the General Fund via legislative action.
- As noted above, the annual appropriations process plays a significant role in determining both the size and the configuration of the total program. All available revenues may not be appropriated each year. Keeping these challenges in mind, the following assumptions were used to estimate the revenue available for MDOT's multi-modal program over the next five years.

Federal Revenue Assumptions for Multi-Modal

Multi-modal federal revenue assumptions for 2006 - 2010 include the following:

- Continuation of current federal aviation funding. Federal funding for MDOT's aviation programs is based on the Vision 100, Century of Aviation Reauthorization Act of 2003.
- Moderate increases in federal transit funding apportioned to MDOT are based on SAFETEA-LU. The newly passed federal funding legislation also includes a \$9.2 million High Priority Project bus replacement earmark to MDOT.²
- Federal funding for rail passenger and marine passenger programs are intermittent, based on congressional earmarks and special projects. For the purpose of this five year plan, no federal funding was included in the assumptions. As noted above (the footnote for the prior bullet), the New Starts earmarks in SAFETEA-LU are not included in MDOT's Five Year Program because it has not yet been determined if the projects will be a state or local lead.

State Revenue Assumptions for Multi-Modal

Multi-modal state revenue assumptions for FY 2006-FY 2010 include the following:

- Slight decreases in State Aviation Revenue appropriation levels due to reduced receipt of state aviation fuel taxes.
- Annual state aviation funding from Airport Safety and Protection Program bonds is included in the multi-modal program through December 2007 at which time the bond authorization expires.
- Continuation (i.e., no growth) of the FY 2006 Comprehensive Transportation Fund (CTF) appropriation levels, which are based on partial restoration of prior year sales tax reductions.
- Funding levels for the Michigan Rail Loan Assistance Program are based on anticipated loan repayments.
- Funding levels for the local rail grade crossing program are based on federal funding levels in SAFETEA-LU and continuation of the Act 51 mandated state funding levels

Additional Information about SAFETEA-LU

Under SAFETEA-LU, MDOT should directly receive about an average of \$32.0 million a year in federal transit operating and capital funds. The SAFETEA-LU increases for MDOT include:

✓ Section 5311 Non-urban Formula - apportionment to MDOT will nearly double over the life of SAFETEA-LU. The annual average apportionment will grow from \$8.48 million from the previous federal bill to \$15.89 million under SAFETEA-LU.

² Not yet included in MDOT's Five Year Program are the two New Start earmarks provided for SAFETEA- U, including the \$100 million for the Ann Arbor to Detroit Transit Improvement Project. It has not yet been determined if these projects will be a state or local lead.

- ✓ There will be a \$1.0 million average annual increase in Section 5310, Elderly and Persons with Disabilities Formula, apportionment to MDOT. The annual average apportionment will grow from \$2.62 million from the previous federal bill to \$3.65 million under SAFETEA-LU.
- ✓ The New Freedom Program and the Job Access Reverse Commute Program will each receive slightly less than \$1.0 million per year.

While federal transit revenues for MDOT's multi-modal program will average about \$32.0 million a year, MDOT's federal transit program as shown in annual appropriations bill is considerably higher than this amount - over \$60 million per year. The excess federal authority is needed to accommodate the <u>potential</u> amount of large annual earmarks to MDOT or to the individual transit agencies. The transit agencies will request MDOT to apply for the funds on their behalf. The five-year program reflects continuation of the annual appropriations of \$60.3 million, even though the amount is generally overstated each year.

2006 - 2010 Multi-Modal Program

For FY 2006 to FY 2010, MDOT estimates that it will invest an average of \$428.00 million per year in state and federal funds its multi-modal program.

Successful implementation of these programs is dependent on the annual appropriations process and the efforts of airport authorities, transit agencies, private non-profit transportation providers, rail freight carriers, Michigan governments and businesses, intercity passenger carriers and others.

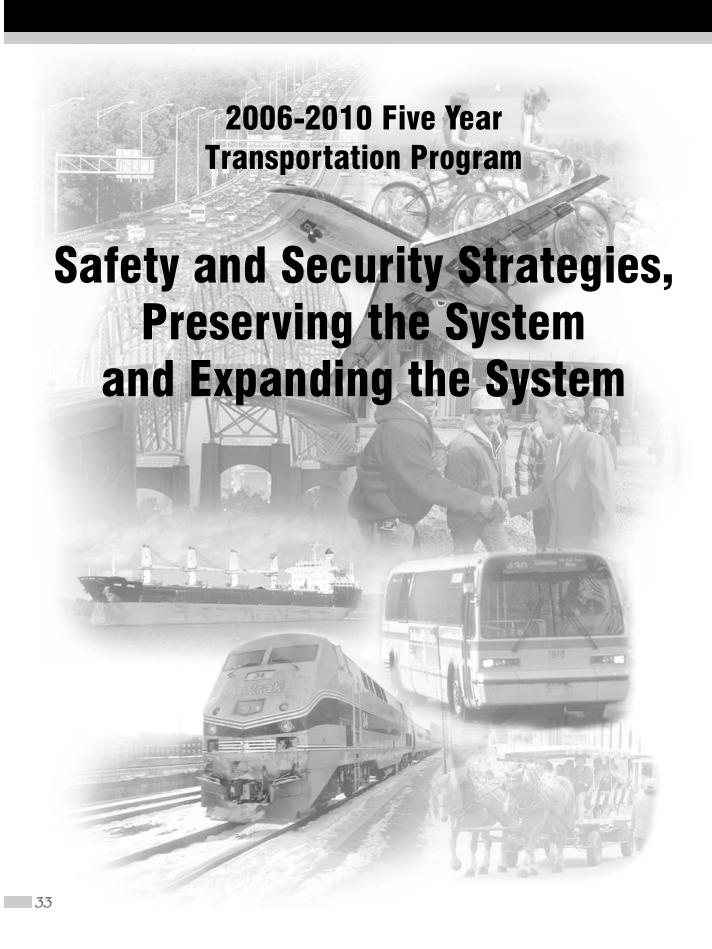
lion a year in excess federal authority included in MDOT's annual budget bill to allow for potential congressional transit earmarks to MDOT or to transit agencies that request MDOT submit the federal application on their behalf

³ Includes \$25 to \$35 mil-

MDOT's Five Year Multi-Modal Program

(Subject to appropriation of state and federal funds)

	Annual Average	Five-Year Total
AVIATION		
Aviation Improvement Program	\$153.80 million	\$769.00 million
Air Service Program	\$ 1.00 million	\$ 5.00 million
All Weather Airport Access Program	\$ 0.74 million	\$ 3.70 million
BUS, MARINE AND RAIL ³	\$272.02 million	\$1,360.09 million
TOTAL	\$427.56 million	\$2,137.79 million



Safety and Security Strategies

History of Homeland Security in MDOT

MDOT has been involved in the state's traditional emergency management for more than 50 years. Many recall the "civil defense" plans from the 1950s. Since then, an all-hazards approach to emergency management which included enemy attack has been used. Following the events of Sept 11, 2001, MDOT developed a Threat Assessment Team. This team has expanded to cover all modes of transportation to become the Transportation Risk Assessment and Protection (TransRAP) Team with a dual role as the Transportation Subcommittee for Critical Infrastructure Protection Committee.

2006-2010

Five Year Transportation Program

Homeland Protection Board

Governor Granholm signed Executive Order 2003-06 forming the Homeland Protection Board. The Homeland Protection Board is responsible for the development, implementation, and revision of an effective and coordinated homeland security strategy. It is also responsible for the state's domestic preparedness including continuing to strengthen the state's capabilities to detect, prepare for, prevent, secure and protect against, respond to and recover from, any terrorist threats or attacks. Director Gloria Jeff is an appointed member of the Homeland Protection Board, representing the transportation sector.

In early 2004, through diligent work within MDOT, the Homeland Protection Board incorporated transportation into the State Homeland Security Strategy*. This inclusion has been used as an example for other states. In addition, MDOT continuously prepares to respond to terrorist incidents through its emergency planning, training and exercising efforts. Many state agencies, including the departments of Transportation, Military Affairs, Environmental Quality, Agriculture, and Community Health, have a critical role to play in Michigan's response and recovery plans.

The Critical Infrastructure Protection (CIP) Committee is an advisory committee that reports to the board. This committee works to determine interdependencies between sectors such as energy, water, agriculture, transportation, etc. One function of the Transportation Risk Assessment and Protection Team is to serve as a CIP subcommittee.

*For security reasons, details of strategies and plans are not being released to the public.

Members represent MDOT's Aeronautics, Passenger Rail and Freight, Border Crossings, Highway and Roads, as well as Michigan State Police Motor Carrier Enforcement, Department of Labor and Economic Growth Motor Carrier Licensing and Department of Information Technology. This group assisted in the development and directs the implementation steps of the strategy.*

MDOT is actively participating in the protection of critical infrastructure with the state and federal agency partners in homeland security. The transportation strategy* remains focused on the protective measures for the international border crossings.

One component in providing this protection and coordination includes reviewing key transportation facilities and systems based on vulnerability and risk assessments. By objectively reviewing the likelihood and the susceptibility of hazards or threats, the impacts for the physical assets and the community can be quantified.

Homeland Security preparedness efforts must be designed to address the physical security enhancements at the border crossings while continuing to facilitate mobility. In Michigan, Critical Infrastructure and Key Assets at the state and local levels were identified during the assessment process.

Critical Infrastructures (CI) are the physical systems and assets so vital to the people of the state of Michigan or the nation that their incapacity or destruction would have a debilitating impact that would seriously weaken the state's security, economic stability, public safety or threaten the public health, safety, and welfare.

Key Assets (KA) are defined in the National Strategy for Homeland Security as: "Individual targets whose destruction would not endanger vital systems, but could create local disaster or profoundly damage our Nation's [States] morale or confidence."

Highways and Roads

MDOT is responsible for approximately 9,700 miles of state highways which includes Michigan's 1240 miles of interstate. By using our region boundaries, MDOT's all-hazard approach (which focuses on general preparedness rather than readiness for a specific type of disaster) reaches out to the local agencies through existing relationships with the municipal and county roads agencies as well as local emergency management coordinators. In addition to state highways, there are roughly 110,000 miles of local roadway. These highways and roads include 11,000 bridges throughout the state (4,300 of these bridges are under MDOT jurisdiction).

In order to keep state highways safe from terrorist attack, MDOT is actively reviewing the entire transportation network to closely evaluate how various components are connected and what risks exist from potential threats. Plans have been in place for some time now regarding threats to the state's highway system.

MDOT has evacuation routes and scenarios plotted out regarding the necessary closure of any part of the state's transportation network. This includes the need to redirect traffic from a major interstate in order to protect motorists or provide easy access into or out of a community along that freeway corridor. The plans, which were originally drawn up for weather-related catastrophes, have been used from time

to time to address problems caused by serious traffic accidents. These plans are kept up-to-date to ensure they are as complete as possible for any scenario that may occur.

Border Crossings and the Mackinac Bridge

Michigan's border crossings and international trade corridors are critical to the well-being of the local, state, and national economies and therefore critical to the national security.

It is Michigan's vision to establish and maintain a transportation border infrastructure network that allows for the seamless movement of people, goods, and services in a cost-efficient, timely, and safe and secure manner. MDOT continues to improve the protection, collaboration and coordination with homeland security agencies in the development, construction, and operation of border facilities.

MDOT shares the ownership of two of the three bridge border crossings (International and Blue Water bridges) with Canadian partners. The Ambassador Bridge is privately owned. There is also one vehicular tunnel crossing (Detroit Windsor Tunnel) and several rail and ferry crossing.

MDOT completed a second round of security assessments for the International Bridge, the Mackinaw Bridge and the Blue Water Bridge with partners from the federal government. Members of the federal team included military and economic specialists. These bridges are critical to the state's economy and to the national security. Each of the bridges received high marks from the team.

MDOT's original assessments from 2002 defined a strong path to follow and the federal team validated and verified the results. The Mackinac Bridge overall implementation of the assessment plan is one of the strongest in the nation and a model for other bridges. In addition, action plans* taken at these MDOT-owned bridges have been developed to respond to the Department of Homeland Security terrorist threat level.

Border Crossing Policy

The world's largest bilateral trade relationship exists between the United States and Canada, with Michigan positioned as a leader in international trade.

Goods and people moving across Michigan's borders significantly impact the economies of Michigan and Ontario, and the economies of the United States, Canada and other nations.

Recognizing Michigan's vision and common goals with Ontario to establish and maintain a transportation border that facilitates and encourages the seamless, safe

and secure transport of goods, people and services in a cost-efficient and timely manner, the State Transportation Commission adopted the following policy statements on October 28, 2004.

The Michigan Department of Transportation shall:

- 1. Work to assure adequate transportation capacity at Michigan's border crossings to facilitate, advance and, in part, provide for the seamless movement of people and goods between Michigan and Ontario;
- 2. Provide for the protection of and upgrade the transportation facilities on our borders through collaborative initiatives with the private sector and other governmental agencies to provide an appropriate level of redundancy among crossings and to ensure continued access for international trade and commerce between the U.S. and Canada:
- 3. Study needs for improving and expanding the transportation structures and infrastructures and identify advancing technologies through persistent research and analysis in order to continue to adapt to the demands of international trade and commerce;
- 4. Work to enhance cooperation, coordination, and communication with U.S. and Canadian border inspection and transportation agencies, local and regional governments, private operators, crossing users, neighborhoods, and other stakeholders affected by border crossings, in order to facilitate continued improvement to both the mobility and safety of border crossings;
- 5. Collaborate closely with state, local, provincial and private sector partners to proactively address topics of mutual interest that impact border crossings;
- Work to increase federal funding for border transportation infrastructure capacity and safety improvements, and to use funding effectively to achieve the intent of this policy;
- 7. Work cooperatively with the other agencies responsible for improvements to border inspection processes, and encourage them to facilitate the movement of low-risk passengers and cargo.
- 8. Provide adequate inspection staffing levels, and implement the utilization of technological advancements that can reduce border transit times while enhancing security.

Trains and Buses

Studies have shown that the actual terrorism activity involving transportation on bridges is five percent. The remaining 95 percent of terrorist activity is on buses, passenger rail and subway trains. This is a major concern for any of these modes of transportation.

In Michigan, this includes:

- 180 carriers providing bus service
- Three routes designated for passenger rail travel
- More than 30 rail freight companies
- Local transit in 15 urban areas
- 20 ferry services including three international crossings

MDOT reviews interdependencies and coordinates with private agencies and local jurisdictions.

Motor Carrier

In the hazardous materials motor carrier sector, MDOT continues to work with the Michigan State Police and Michigan Department of Labor and Economic Growth. In 2001, there were more than 525 motor carrier licensing applications. Since 2002, the Michigan Public Service Commission has included specific applications for hazardous materials licenses. MDOT is the hazardous materials routing designation agency, and Michigan State Police is responsible for enforcement.

The goal in hazardous material transportation is to deny the terrorist the ability to use legitimate businesses, infrastructure or vehicles as weapons.

Aviation

In Michigan, there are approximately 236 airports for public use. Half of the airports are publicly owned, and the other half are privately owned. MDOT's Aviation staff provides security training through safety seminars, educational services and aviation events as well as working with the Federal Aviation Administration (FAA).

The U.S. Department of Homeland Security's Transportation Security Administration regulates and enforces security for passenger air transportation.

Information Technology

MDOT is connected to the transportation system electronically in many ways such as the Michigan Intelligent Traffic System (MITS) in the Metro Detroit area and voice and data communication. MITS can assist in moving traffic efficiently during emergencies and crisis situations.

MDOT partners with the Department of Information Technology to assure secure connections and maintain data backup and recovery systems. MDOT continues to update the business continuity plan and the disaster recovery plan in regards to IT needs.

Protection for Transportation

MDOT has identified vulnerabilities and leveraged "best practices" to minimize them. Current strategies and plans are regularly reviewed and updated as part of incident management. MDOT staff works with others on overlapping issues to be proactive and adaptive.

Safety and Security Strategy and the State Long Range Plan

The goals of the state long range plan provide direction for all transportation programs using federal funds. Promoting the safety and security of the transportation system for users and passengers, pedestrians and motorized and non-motorized vehicles is one of our goals.

To improve the safety and security of our transportation system, MDOT is working with other organizations specifically to improve the security of our transportation system. In the wake of the September 11, 2001, terrorist attacks, that effort will continue. The safety of our transportation systems is a fundamental decision and consideration in every transportation investment every project MDOT undertakes. MDOT will also continue to work closely with other organizations to improve transportation safety.

One of major strategies is to focus our investment on corridors of higher significance. These corridors provide higher levels of support to the state and national economy, and to the movement of goods, services and people. The importance of these corridors requires that we rebuild and modernize them, and ensure the highest level of safety and security within them.

MDOT is also developing is a comprehensive approach to the safety and security of the state's border infrastructure. Protecting these facilities while ensuring the efficient movement of people and goods between the U.S. and Canada, is critical to the economic health of the state and the nation. Changes in transportation technology, such as Intelligent Transportation Systems (ITS) and alternative fuel vehicles, will also have an impact.

We must continue to be concerned about the impact of transportation on our natural and human environment and we must improve the safety and security of our transportation systems.

Traffic Safety Goals and Strategies

The department, working in partnership with other state agencies through the Governor's Traffic Safety Advisory Commission, has adopted the State of Michigan Strategic Highway Safety Plan. This plan includes the goal of reducing fatalities on all Michigan roadways to 1.0 per 100 million vehicle miles traveled by 2008. The 2004 statewide rate was 1.14 per 100 million vehicle miles traveled while the nationwide average was 1.5. On the state trunkline system the rate in 2004 was 0.93 per 100 million vehicle miles traveled and 1.37 on Michigan's local road system. In response to the reduction of fatalities, the Department was awarded The American Association of State Highway Transportation Officials (AASHTO), 2005 Safety Leadership Award for "Driving Down Fatalities."

In order to maintain this goal, the department will continue its comprehensive \$60 million Safety Program to provide:

- Improved driver guidance,
- Warning for motorists who leave the roadway,
- Minimal consequences of leaving the roadway,
- Improved safety at identified locations and
- Uniform application and replacement of traffic control devices for the efficient and safe operation of our roadway system.

With the addition of safety as a separate goal, the department has identified five focus areas. They include: Senior Mobility, Pedestrians, Traffic Operations, Roadway Delineation, and the Safety Improvement Program.

In 2001, 16 percent of all drivers were age 65 or over. By 2020, this number will increase to 25 percent. MDOT recognizes the influence of elder drivers and their impact on the safety and traffic operations of Michigan's roadways. The 2005 Safety Program implemented many efforts to improve driver safety including improved driver guidance through enhanced pavement markings, signing, and traffic signal visibility. The reflectivity and legibility of freeway guide signs and the width of pavement marking edge lines were increased for the benefit of senior drivers and improved overall driver guidance. These efforts are a direct result of the 2004 North

American Elderly Mobility Conference, sponsored by the Governor's Traffic Safety Advisory Commission. The conference featured best practices in the area of safety and traffic control devices.

In 2006, MDOT will adopt the box span signal display as its standard signal design.

This design provides enhanced motorist visibility, which will be a positive contribution to senior mobility. In addition, this design will improve the safety of maintenance workers and motorists when work is being performed on a traffic signal.

Brighter sign materials are continuing to be evaluated along Michigan's freeways. In 2005, MDOT changed the standards for yellow signs to incorporate the use of fluorescent yellow to improve the recognition and legibility of freeway warning signs. In 2006, the emphasis of sign evaluation will be on the remaining signs used by the department, which includes stop signs, yield signs and speed limit signs. MDOT's goal is to increase sign recognition with minimal or no budgetary impact.

Increased safety for pedestrians is another major concern of the department. MDOT has developed pedestrian signal guidelines for the uniform application of pedestrian notification devices including audible pedestrian signals. In addition, the department is evaluating countdown pedestrian signals to determine the appropriate placement criteria. Countdown pedestrian signals provide peace of mind and additional information to pedestrians on how much time is remaining to cross the roadway, allowing them to adjust walking speed.

Studies have shown properly timed signal systems improve corridor travel time, reduce individual intersection delay by 37 percent, and a nine percent fuel savings. Such improvements will address aggressive driving on our roadways. In 2005, 300 traffic signals in the Metro Region, including the city of Detroit, (both trunkline and non-trunkline) were retimed. It is important to periodically update major traffic signal corridors in order to ensure efficient operation. MDOT's proposed goal is to retime corridors every eight years. The current retiming cycle is 15 years.

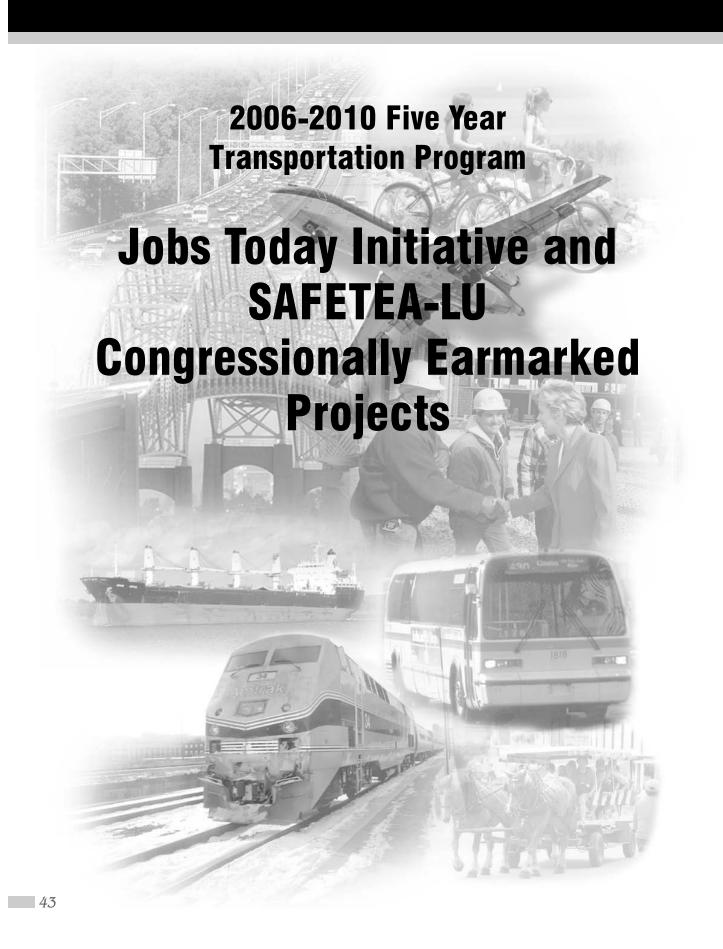
Another tool in our operations toolbox is the roundabout. This type of intersection treatment replaces traffic signals with a free-flowing traffic facility, which has been shown to significantly reduce intersection crashes when applied to appropriate locations. A roundabout was constructed in Macomb County at M-53 and 18 ½ Mile Road in 2005; another is being planned in 2006 for the I-75 and M-81 ramps.

For improvements to roadside delineation along freeways, the department will continue its efforts to install pavement markings with wider edge lines. The use of a pavement marking in a rumble strip has proven to act as a wet, nighttime delineation system. The department is in its third year of participating in a pilot project that involves installing pavement markings inside rumble strips. New standards require rumble strips to be placed closer to the travel lane. The combination of closer rum-

ble strips and improved pavement markings provides a positive nighttime delineation system. Typical pavement markings do not function fully when covered by a film of water. Additional roadside delineation in the form of larger and brighter delineators is also being evaluated.

The Safety Improvement Program has been proven successful with the construction of road improvement projects in response to traffic crash analysis. These projects typically involve improving safety at high crash intersections and short corridors. Because of this success, the department proposes increasing the existing \$19 million budget.

The Local Agency Safety Initiative is an addition to the Safety Improvement Program to address the crash fatality rate on the local road system. MDOT staff members are assisting interested counties and municipalities in identifying high crash locations on their road systems. A goal of the initiative is to provide matching funds to local roadway authorities beyond what is currently available from the department for safety measures.



Jobs Today Initiative and SAFETEA-LU Congressionally Earmarked Projects

A safe, well maintained and efficient transportation system provides the backbone for all economic activity within the State of Michigan. Through the Jobs Today Initiative and available earmarks from SAFETEA-LU, the MDOT will invest approximately \$618 million of additional state trunkline work over the next five years. Approximately \$418 million through Governor Granholm's Jobs Today Initiative and \$200 million from SAFETEA-LU earmarks will be invested in the 2006-2010 Five Year Transportation Program. MDOT estimates these investments will support approximately 11,000 jobs and will create a safer and more efficient transportation system for the residents, businesses and visitors of the State of Michigan. With this additional investment, MDOT anticipates the total FY 2006 highway capital and maintenance program will be \$1.76 billion. The estimated FY 2007 highway capital and maintenance program will be \$1.48 billion.

THE JOBS TODAY INITIATIVE: In support of Governor Granholm's Jobs Today Initiative, MDOT will add approximately \$418 million of bonding to its 2006 - 2010 Five Year Transportation Program. These additional revenues will be utilized to advance system preservation projects and the construction of critical capacity increase projects. Approximately \$267 million will be for road and bridge preservation work and approximately \$151 million will be for capacity improvement work over the 2006-2008 three-year period. In addition to stimulating job growth, this investment will enable continued progress toward achieving and sustaining the department's state trunkline pavement condition goals.

Over the three year period, this initiative will fund 145 projects, improve approximately 600 miles of pavement and 42 bridges, as well as address six capacity deficiencies. In fiscal year 2006, Jobs Today will fund a total of 120 projects for an estimated cost of \$242 million, improving approximately 520 miles of pavement and 39 bridges as well as address two capacity deficiencies. In fiscal year 2007, Jobs Today will fund a total of 24 projects for an estimated cost of \$168 million, improving approximately 80 miles of pavement and three bridges as well as address three capacity deficiencies. In fiscal year 2008, Jobs Today will fund one project for an estimated cost of \$8 million to address capacity deficiencies.

PRESERVATION: State trunkline road and bridge preservation projects included in the Jobs Today Initiative total approximately \$267 million (64 percent of the \$418 million Jobs Today program. This work is consistent with the Preserve First Initiative of protecting our existing transportation assets.

Funding is balanced between the freeway system, which supports Michigan's agribusiness and manufacturing economic sectors, and the non-freeway system, which connects to local communities.

2006-2010

Five Year Transportation Program

This investment will create employment opportunities statewide and help stimulate the economy over the next three years (2006 – 2008). In addition to stimulating job growth, this investment enables continued progress towards achieving and sustaining the department's system condition goal. It focuses on areas of the state having difficulty achieving the department's pavement condition goals. To implement this initiative, MDOT will employ a mix of fixes (long, medium, and short term). Bid lettings will occur over a two year timeframe, which will allow for construction activity to occur in fiscal years 2006 through 2008.

SYSTEM CONDITION IMPACTS: For more information on system condition, refer to the Preserving the System section.

CAPACITY INCREASE: MDOT has identified capacity improvement projects that will be advanced to the construction phase as part of the Jobs Today Initiative. These projects include:

- M-59 in Livingston County
- I-96/Wixom Road interchange ⁴
- I-94/Baker Road interchange
- I-196/Chicago Drive interchange
- M-24 in Lapeer County
- I-94 BL in Battle Creek

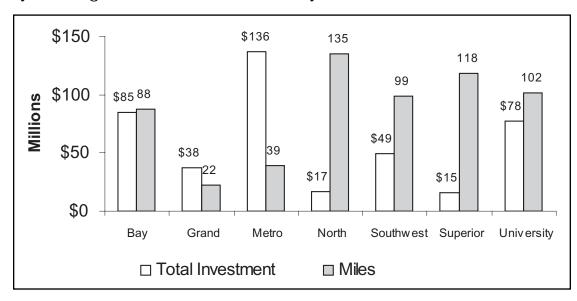
In addition to these six projects, MDOT will also invest in operational type improvements on or adjacent to the state trunkline system. The following projects will provide improved access to existing and/or planned developments which will support continued growth of $21^{\rm st}$ Century jobs across the state:

- US-131BR/Michigan Street Bridge Improvements, Grand Rapids
- US-127 BR/Isabella Road extension

These capacity and operational improvement projects represent 37 percent of the \$418 million Jobs Today program. Construction and some pre-construction activities for four of the six projects identified were deferred under the Preserve First Initiative; however these phases will be reinstated and constructed as part of the Jobs Today Initiative. The capacity improvement projects selected are key projects that can be constructed over the 2006 – 2008 construction season.

These projects will improve safety, and address critical capacity issues in these areas. More details on these projects can be found in the Expanding the System section.

⁴ This project will proceed in 2007 due to veto language in the 2006 Transportation Appropriations Bill. The legislature will need to take action that will enable this project to move forward in 2006. The graph below depicts the total investment and number of miles of improvement by MDOT region attributable to the Jobs Today Initiative.



Jobs Today Intiative Bond Proposal Total Investment and Miles by Region FY2006 to FY2008

SAFETEA-LU EARMARKS: SAFETEA-LU contained \$643 million of congressionally designated projects and earmarks for Michigan. Of this amount, approximately \$196 million was designated for Michigan Department of Transportation trunkline related highway projects and approximately \$244 million was designated for local agency highway and non-motorized projects.

The remaining \$203 million was designated for transit related projects. Twenty-seven MDOT highway projects received funding earmarks within SAFETEA-LU, of which \$22 million was already programmed in the department's 2005-2009 Five Year Transportation Program. The department is committed to utilizing all federal aid available to Michigan under the provisions contained within SAFETEA-LU, as these construction and pre-construction activities will have a positive impact on every region of the state.

Annually, Congress provides a restriction or ceiling on the amount of federal aid that may be obligated during the course of a fiscal year. This is known as "setting the obligation limit."

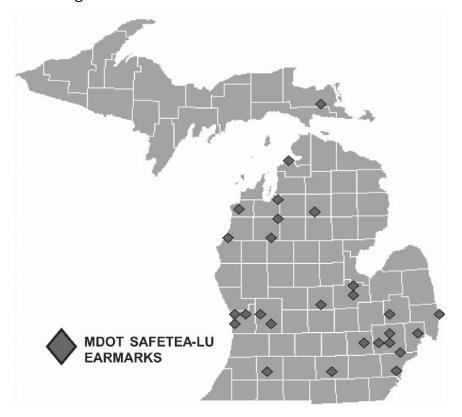
This is a statutory budgetary contract that does not affect the apportionment or allocation of funds; rather, it controls the rate at which these funds may be used. For SAFETEA-LU, the obligation limit for all states has been set at 85% for 2005 and is estimated to average 90% over the life of the bill.

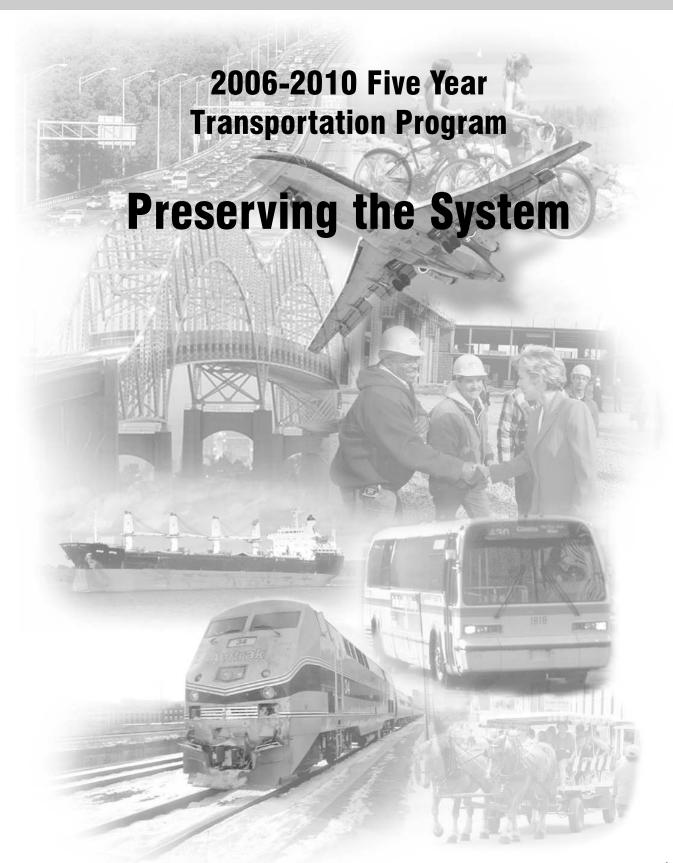
The obligation authority received under SAFETEA-LU is much less than anticipated. As a result, the department has less federal aid available to spend on implementing its 2006-2010 Five Year Transportation Program.

Additionally, funding for implementing earmarked projects is provided to MDOT at percentages ranging from ten-percent to twenty-percent per year over the life of the reauthorization bill. The consequences of these actions means MDOT will have limited federal aid available on an annual basis to implement these earmarks, especially in the early years of SAFETEA-LU. In order to implement all of MDOT's SAFETEA-LU earmarks, the department will bond for approximately \$200 million, due in large part to lower than anticipated federal obligation authority limits.

SAFETEA-LU EARMARK AND JOBS TODAY CAPACITY IMPROVE PROJECTS:

Over the next four years, the department will work with its transportation stake-holders to implement both the Jobs Today projects and the SAFETEA-LU earmark projects consistent with the descriptions contained in the federal law. New strategies will need to be developed for the use and timing of the earmarked funds for proposed projects that are new to the MDOT program. For information about specific projects, please review the Preserving the System and the Expanding the System sections of this document. The projects are listed in the appropriate MDOT Regions.





Preserving the System

2006-2010

Five Year Transportation Program

Multi-Modal Program

Investment decisions for the Multi-Modal Program are made on an annual basis, therefore, the five-year total investment in preservation or expansion can not be projected. However, it is expected that the majority of MDOT's multi-modal program consists of preserving the existing infrastructure and service levels.

The majority of the federal and state multi-modal funding managed by MDOT will be focused on:

- Preserve, maintenance and enhanced safety for the locally owned aviation infrastructure.
- Preservation of existing local transit services via state and federal operating assistance to service providers.
- Preservation and maintenance of the existing locally-owned transit infrastructure via distribution of federal funds and state match for routine vehicle replacement in rural areas and among specialized service providers.
- Support of local capital strategies established by individual transit agencies via matching federal capital grants. The mix of capital investment focused on infrastructure replacement and rehabilitation versus capacity expansion will be determined locally.
- Preservation/maintenance of existing intercity bus and rail services by providing financial assistance to service providers, both operating assistance and capital assistance for maintenance and improvement of carrier-owned infrastructure.
- Preservation/maintenance of existing locally-owned public ferry infrastructure as determined by the ferry authorities.
- Preservation/maintenance of the existing state-owned infrastructure, safety improvements (capital).

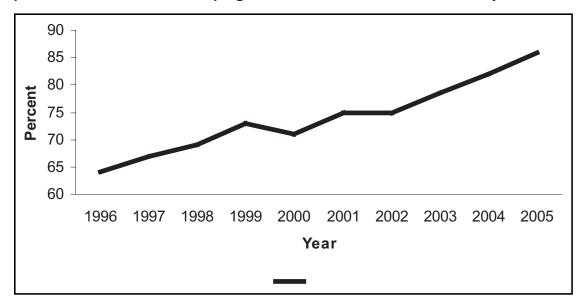
Highway Program

System Condition Goal Accomplishments

MDOT has made substantial progress since the adoption of our pavement condition goal of having 95 percent of the freeways and 85 percent of the non-freeways in good condition by 2007. The *Preserve First* focus allowed us to improve the condition of state roads and bridges to protect the investments of Michigan taxpayers. The *Jobs Today* program will enable us to substantially meet the goal. Please refer to the following graph for an illustration of the department's progress.

The road and bridge preservation projects included in the five year program are prioritized based on approved asset management strategies, with a specific focus on

repairing our worst roads and bridges and extending the life of roads and bridges to keep them in good condition. Our programs include a combination of long-term fixes (reconstruction), intermediate fixes (resurfacing/rehabilitation), an aggressive capital preventive maintenance (CPM) program, and routine maintenance of the system.



State Trunkline Pavement in Good Condition (Freeway & Non-Freeway)

In fiscal year 2004, MDOT began implementation of a four-year Non-Freeway Resurfacing Program (NFRP). This program will accelerate progress toward achieving the pavement preservation goal by focusing approximately \$40 million on low volume, non-freeway roadways in poor condition from 2006 to 2007.

MDOT also completed a process improvement in fiscal year 2004 designed to improve the pavement data collection and analysis process. The process improvement created a database environment and automated remaining service life estimation. The result of this effort has improved data consistency and efficiency, as well as facilitate faster processing time and easier implementation of system adjustments.

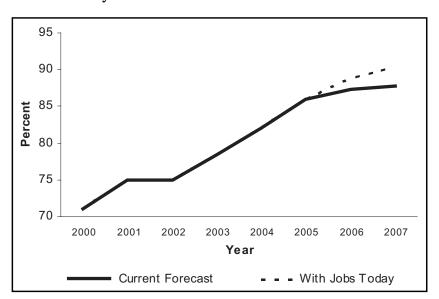
This Road Quality Forecasting System (RQFS) is a strategy analysis tool used by MDOT to project results of pavement rehabilitation policies and proposed projects. Working from current pavement condition, age, and type and factoring in aging and fix strategies, RQFS estimates future condition of the state trunkline system.

Remaining Service Life (RSL) is defined as the estimated remaining time in years until a pavement's most cost-effective treatment is either reconstruction or major rehabilitation. Pavements with an RSL of two years or less are considered to be in the "poor" pavement category.

Based upon the strategies and projects contained in this 2006-2010 Five Year Transportation Program (including the Jobs Today Initiative), we have used the RQFS tool to forecast future pavement condition.

The following graph depicts the increase in good pavement condition attributable to the Jobs Today Initiative.

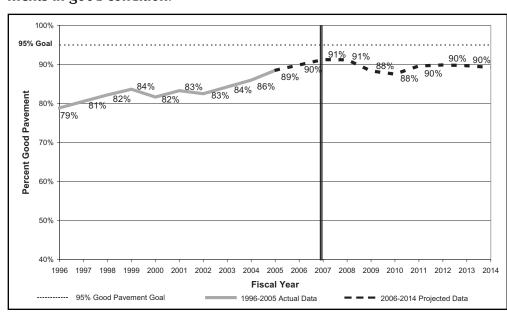
State Trunkline Pavement in Good Condition (Freeway & Non-Freeway)



The following graph shows that progress continues to be made in increasing the percent of good pavements on the freeway network. At the end of FY 2005, 89 percent of MDOT's freeway system was in good condition.

With the additional funding from the Jobs Today Initiative for FY 2006 and FY 2007, RQFS forecasts project that by the end of FY 2007, 91 percent of the freeway system will be in good condition. With the investment levels anticipated, MDOT would be able to maintain the condition state of approximately 89 percent of freeway pavements in good condition.

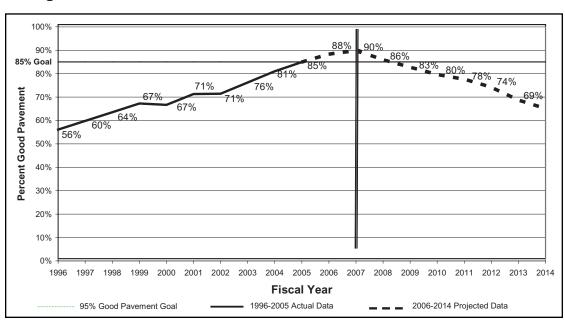
Statewide -Freeway System 1996-2005 Actual Data 2006-2014 Projected Data



Similarly, MDOT forecasts that progress will continue to be made on the non-freeway system to increase the percentage of those pavements in good condition by FY 2007. At the end of FY 2005, 85 percent of MDOT's non-freeway system was in good condition.

This is the first year that non-freeway system reached the department goal of 85 percent good. With the additional funding from the Jobs Today Initiative for FY 2006 and FY 2007, RQFS forecasts project that by the end of FY2007, 90% of the non-freeway system will be in good condition.

With the investment levels anticipated, MDOT would be unable to maintain this condition state. Strategy analysis is ongoing to determine the investment level necessary to maintain the non-freeway system percentage of pavements in good condition at a high level.



Statewide -Non-Freeway System 1996-2005 Actual Data 2006-2014 Projected Data

Incorporating the proposed \$268 million in Jobs Today road and bridge preservation work will result in a two percent improvement in statewide pavement condition. This additional investment will help the department make progress towards achieving the pavement condition goal and sustain the long-term health of the trunkline system.

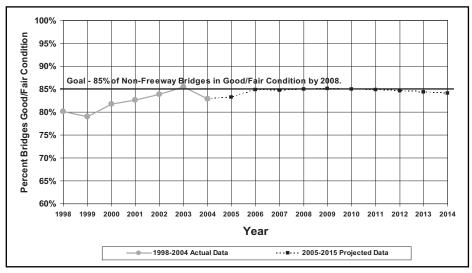
Bridge Condition Forecast

MDOT's Bridge Management System (BMS) is an important part of our overall asset management process. BMS is a strategic approach to linking data, strategies, programs and projects into a systematic process to ensure achievement of desired results.

An important BMS tool used by MDOT to develop preservation policies is the Bridge Condition Forecasting System (BCFS). Working from current bridge condition, bridge deterioration rate, project cost, expected inflation, and fix strategies, BCFS estimates future condition of the state trunkline bridge system.

As shown in the charts below, we have met and are projecting to sustain the non-freeway bridge goal of 85% good. We are also making steady progress towards our freeway bridge goal. Projections show that we will reach a freeway bridge condition of approximately 87 percent good by 2008.

Statewide -Bridge Condition Non-Freeway



Statewide -Bridge Condition Freeway

